

# A new species of *Odontorrhynchos* (Orchidaceae, Spiranthinae) from Bolivia

DARIUSZ L. SZLACHETKO

BRN 246861

Gdańsk University, Department of Plant Ecology and Nature Protection, 80–441 Gdańsk, Al.  
Legionów 9, Poland

## CONTENTS

Introduction .....	123
<i>Odontorrhynchos monstrosus</i> Szlach .....	123
References .....	125

**SYNOPSIS.** A new species of *Odontorrhynchos*, *O. monstrosus* Szlach., is described from Bolivia.

## INTRODUCTION

The genus *Odontorrhynchos* includes five species found mainly in the subtropical zone of South America and the Andes. It was described by Correa (1953), based on *Stenorrhynchos castillonii* Haum. Garay (1982) added a further four species to the genus.

*Odontorrhynchos* is closely related to *Brachystele* Schltr., from which it differs primarily in the structure of the rostellum and viscidium. The rostellum in *Odontorrhynchos* is ligulate, rounded at the apex, with a large, oval viscidium on its inner surface which, after slipping from the rostellum, leaves three teeth of different size. The central tooth is large and slightly receding in relation to the lateral ones. In *Brachystele*, the rostellum is small and frequently wedged between the robust lateral stigma lobes. A small viscidium arises on the external surface of the rostellum which is greatly lingually introverted outwards and so appears to arise on the internal surface. The rostellum remnant is notched or reduced to a thin, rapidly drying, membranaceous fovea. Apart from this, *Brachystele* usually boasts a well formed column foot and oblique bases of the lateral sepals, whereas in *Odontorrhynchos*, the column foot is reduced and the bases of the lateral sepals are straight.

So far, only *O. chlorops* (Rchb.f.) Garay has been recorded from Bolivia. A new, previously undescribed Bolivian species was found among herbarium material of this genus deposited at The Natural History Museum.

## ODONTORRHYNCHOS MONSTROSUS SZLACH.

Planta habitu ad *O. chloropsem* vergens, sed labello indiviso in formam huic *Spiranthidi* simili, valde incrassato, in centro e plicis carnis duobus jam dignoscenda. Type: Bolivia, far

below Quime, near bridge in gorge, 18 April 1949, Brooke 5498 (BM-holotype). Fig. 1.

*Stem* 54.0 cm high, 7.0 mm in diameter at base, 3.5 mm in diameter below inflorescence, erect, stout, glandular above one-fifth, densely along inflorescence, covered by cauline bracts. *Leaves* 4, forming a basal rosette, separated from the flowering stems, petiolate; petiole up to 10.0 cm long, narrow; blade up to 15.0 cm long and 4.5 cm wide, oblong- to elliptic-lanceolate, acute. *Cauline bracts* 10, herbaceous, with hyaline margins, tubular, acute, lower and middle longer than, upper as long as internodes, middle and upper minutely and densely glandular at margins. *Inflorescence* 18.0 cm long, many-flowered, multi-lateral, dense, cylindric. *Floral bracts* 14.0 mm long, ovate-lanceolate, acuminate, 3-nerved, herbaceous, densely glandular along margins, glabrous in the centre, lower longer than, upper shorter than flowers. *Flowers* medium-sized, subsessile, tubular, densely glandular outside, green. *Pedicel* 1.0 mm long, twisted. *Ovary* 9 mm long. *Dorsal sepal* 8.2 mm long, 5.2 mm wide, triangular-ovate, cuspidate, 3-veined, fleshy, concave in the centre. *Lateral sepals* 9.0 mm long, 3.5 mm wide, oblong-falcate, cuspidate, 3-veined, fleshy. *Petals* 8.0 mm long, 2.0 mm wide, spatulate, acute, single-veined, free from dorsal sepal, fleshy, sparsely glandular along the outside margins. *Lip* 9.0 mm long, 5.5–6.0 mm wide, sessile, elliptic-oval in general outline, with no constriction, fleshy, thinner at apex, concave at the base, and with two horn-like appendages near the basal lobules, pleated and crenated in apical part, with two fleshy crests in the centre, completely free from one another or fused together at their apices; lip surface papillate outside and in the centre inside. *Column* 3.0 mm long, erect, massive; column foot 3.0 mm long, short, massive, oblique, adnate to the ovary. *Anther* 2.6 mm long, ovate. *Rostellum* 1.2 mm long, triangular, rounded at apex, 3-dentate after removal of viscidium, the middle tooth the longest, lateral teeth short, reduced. *Viscidium* 1.5 mm long, oval, massive.

**ETYMOLOGY.** *monstrosus* (Lat.) – monster; in reference to

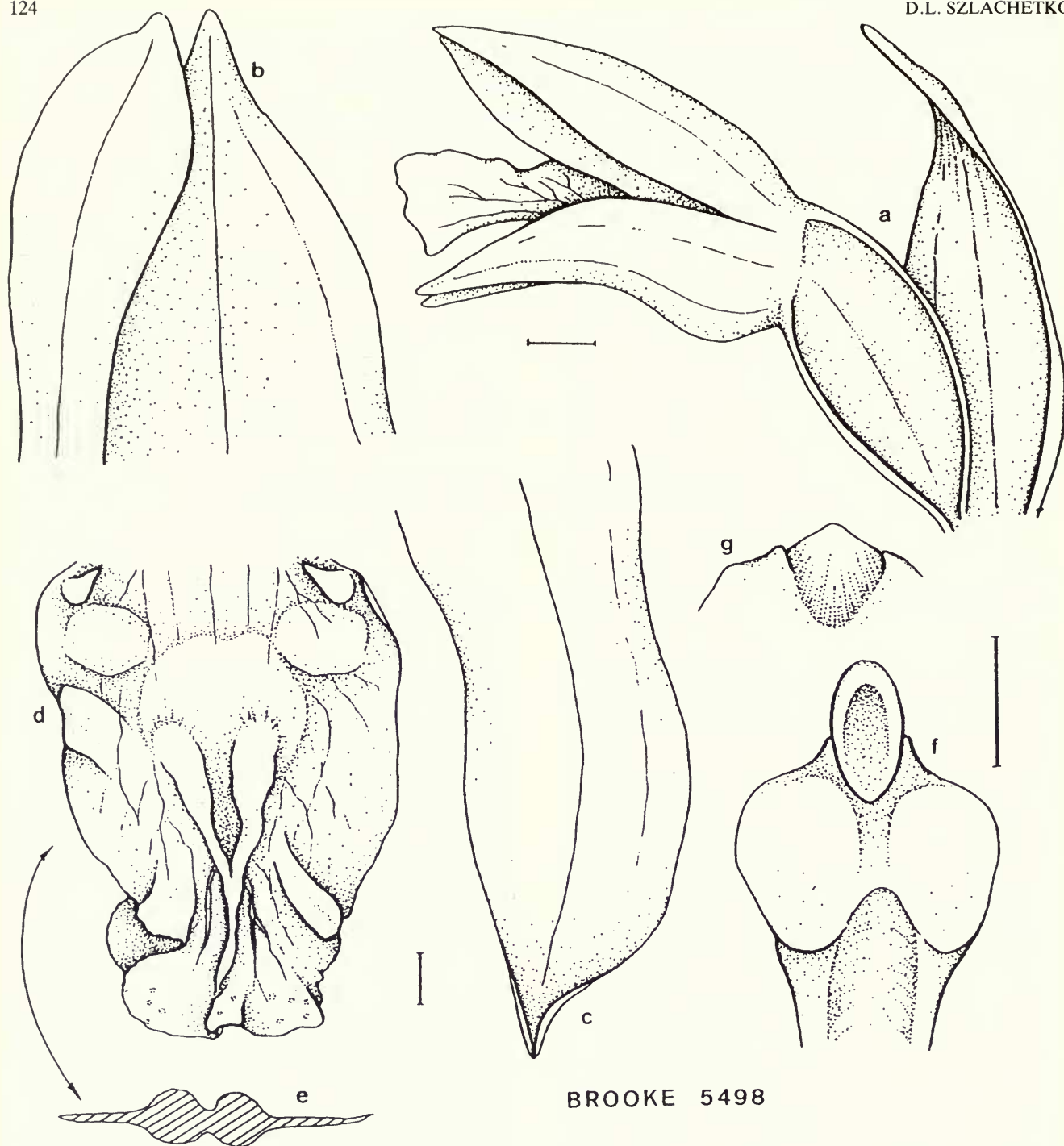


Fig. 1 *Odontorrhynchos monstrosus* Szlach. a: flower and floral bract; b: dorsal sepal and petal; c: lateral sepal; d: lip, flattened; e: cross section of lip; f: column, bottom view; g: rostellum remnant. Each scale indicates 1 mm. (Drawn from the holotype, The Natural History Museum).

the lip shape, which is reminiscent of the head of a monster.

*Odontorrhynchos monstrosus* is known so far only from the type collection, which was found 1828 m above sea-level, among rocks by a river in a warm gorge. It differs from all other known species in the genus by its lip shape, which is unconstricted, elliptic-oval in general outline, pleated in the apical part, with two fleshy ridges in the centre, which may merge at the apex or remain free. At the base of the lip are

two, small, fleshy processes leaning towards the main vein. *O. monstrosus* appears to be most closely related to *O. chlorops* (Rchb.f.) Garay, sharing a very similar habit.

**ACKNOWLEDGEMENTS.** I wish to express my appreciation to the Curator of the General Herbarium at The Natural History Museum for the hospitality during my personal visit. As usual, special thanks are given to Prof. Dr hab. Ryszard Ochrya for the Latin translation.

---

**REFERENCES**

---

- Correa, M. N. 1953. Un nuevo genero y cuatro especies nuevas de Orquidaceas argentinas. *Darwiniana* 10(2): 157–160.
- Garay, L. A. 1982. A generic revision of the Spiranthinaceae. *Bot. Mus. Leaflet. Harv. Univ.* 28(4): 278–425.